

IOTest[®] Anti-TCR V β 23-PE

PN IM2004 – 50 tests – 20 μ L / test – Clone AF23

For Research Use Only. Not for use in diagnostic procedures.

SPECIFICITY

Human variable β 23 chain of the T-cell receptor, called TCRBV23S1 according to the nomenclature of Wei et al (1) is also referred to as TRBV13 (based on the IMGT gene nomenclature) (2, 3).

There is only one member of the V β 23 subfamily (IGRb04 sequence) (4).

The specificity has been confirmed on a mouse T-cell hybridoma expressing a mouse α chain together with the product of a transfected IGRb04 sequence (5).

The AF23 monoclonal antibody (mAb) recognizes 0.4 to 5 % of peripheral CD3 positive lymphocytes in normal blood.

REAGENT

IOTest Anti-TCR V β 23-PE Conjugated

Antibody

PN IM2004 – 1 mL Liquid – 50 tests – 20 μ L / test.

Clone	AF23
Isotype	IgG1, mouse
Immunogen	Human T-cell line
Hybridoma	X63 AG8.653 x F1(BIOBR x KB5C20) spleen cells
Source	Ascites fluid
Purification	ion exchange chromatography
Conjugation	R-phycoerythrin (PE) is conjugated at 0.5 – 2 moles of PE per mole of Ig.

Excitation wavelength: 488 nm

Maximum emission wavelength: 575 nm

Main emission color: orange-red

Buffer 2 mg/mL bovine serum albumin in phosphate-buffered saline containing 0.1% sodium azide.

APPLICATION

Studies of TCR V β 23 positive cells by flow cytometry.

STATEMENT OF WARNINGS

1. This reagent contains 0.1% sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin

or eye contact occurs, wash excessively with water.

2. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
4. Do not use antibody beyond the expiration date on the label.
5. Do not expose reagents to strong light during storage or incubation.
6. Avoid microbial contamination of reagents or incorrect results might occur.
7. Use good laboratory practices when handling this reagent.

STORAGE CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at 2 – 8°C in the dark. Do not freeze.

EVIDENCE OF DETERIORATION

Any change in the physical appearance of this PE-labeled reagent (clear colorless to pinkish liquid) or any major variation in values obtained for control samples may indicate deterioration and the reagent should not be used.

REAGENT PREPARATION

No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

PROCEDURE

This reagent is designed for flow cytometry. A wash is required to yield optimal results. Assay volume: 20 μ L per 5 x 10⁵ cells in one test, or per 100 μ L whole blood.

It is preferable to double stain the sample with another T-cell marker (CD3, CD4, CD8).

SELECTED RESEARCH REFERENCES

1. Wei, S., Charmley, P., Robinson, M.A., Concannon, P., "The extent of the human germline T-cell receptor V beta gene

segment repertoire", 1994, Immunogenetics, 40, 27-36.

2. Lefranc, M.P., Giudicelli, V., Ginestoux, C., Bodmer, J., Muller, W., Bontrou, R., Lemaire, M., Malik, A., Barbie, V., Chaume D., "IMGT, the international ImMunoGeneTics database", 1999, Nucleic Acids Res., 27, 209-212.
3. Lefranc, M.P., "IMGT, the international ImMunoGeneTics database", 2003, Nucleic Acids Res., 31, 307-310.
4. Ferradini, L., Roman-Roman, S., Azocar, J., Michalaki, H., Triebel, F., Hercend, T., "Studies on the human T-cell receptor alpha/beta variable region genes. II Identification of four additional V-beta subfamilies", 1991, Eur J Immunol, 21, 935-942.
5. Romagné, F., Kanagawa, O., David-Ameline, J., Peyrat, M.A., Bonneville, M., Necker, A., "TCRBV23 specificity of two monoclonal antibodies revealed by a panel of human V beta chains expressed in mouse cells", J. Immunol. Meth., 186, 313-322.

PRODUCT AVAILABILITY

IOTest Anti-TCR V β 23-PE Conjugated Antibody
PN IM2004 – 1 mL Liquid – 50 tests – 20 μ L / test.

PE is licensed under patent 4,520,110

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